BRAIN RESEARCH

VOL. 748 NOS. 1,2 **CONTENTS** **14 FEBRUARY 1997**

Cited in Biological Abstracts (BIOSIS) – Chem. Abstracts – Index Medicus (MEDLINE) – Current Contents (Life Sci.) – Excerpta Medica (EMBASE) – Psychological Abstracts (PsycINFO) – Pascal et Francis (INIST-CNRS) – RIS (Reference Update) – Current Awareness in Biological Science (CABS)

Publisher's Note v

Guidelines for the submission of manuscripts vii

Research reports

Rapid Ca^{2+}-dependent NO-production from central nervous system cells in culture measured by NO-nitrite/ozone chemoluminescence
S. Weikert, D. Freyer, M. Weih, N. Isaev, C. Busch, J. Schultze, D. Megow and U. Dirnagl (Germany, Russian Federation) 1

Corticotropin-releasing factor and systemic capsaicin-sensitive afferents are involved in abdominal surgery-induced Fos expression in the paraventricular nucleus of the hypothalamus
B. Bonaz and Y. Taché (USA) 12

Immunolocalization of the plasma membrane Ca^{2+} pump isoforms in the rat brain
T.P. Stauffer, D. Guerini, M.R. Celio and E. Carafoli (Switzerland) 21

Interleukin-6 inhibits long-term potentiation in rat hippocampal slices
A.-J. Li, T. Katafuchi, S. Oda, T. Hori and Y. Oomura (Japan) 30

Peptidases of the peripheral chemoreceptors: biochemical, immunological, in vitro hydrolytic studies and electron microscopic analysis of neutral endopeptidase-like activity of the carotid body
G.K. Kumar (USA) 39

Enhancement of central pressor effect of AVP in SHR and WKY rats by intracranial N^G-nitro-L-arginine
P. Paczwa, A.S. Budzikowski and E. Szczepańska-Sadowska (Poland) 51

Intrastriatal injection of a muscarinic receptor agonist and antagonist regulates striatal neuropeptide mRNA expression in normal and amphetamine-treated rats
J.Q. Wang and J.F. McGinty (USA) 62

Direct vasoactive intestinal polypeptide-containing projection from the suprachiasmatic nucleus to spinal projecting hypothalamic paraventricular neurons
R. Teclemariam-Mesbah, A. Kalsbeek, P. Pevet and R.M. Buijs (The Netherlands, France) 71

Effect of unilateral tympanotomy on auditory induced c-*fos* expression in cochlear nuclei
D.E. Hillman, C.E. Gordon, Y. Troublefield, E. Stone, R.J. Giacchi and S. Chen (USA) 77

Involvement of N- and P/Q- but not L- or T-type voltage-gated calcium channels in ischaemia-induced striatal dopamine release in vitro
C.C. Toner and J.A. Stamford (UK) 85

Effect of isolation-rearing on noradrenaline release in rat hypothalamus and hippocampus in vitro
A.J. Fulford and C.A. Marsden (UK) 93

Intracarotid glucose selectively increases Fos-like immunoreactivity in paraventricular, ventromedial and dorsomedial nuclei neurons
A.A. Dunn-Meynell, E. Govek and B.E. Levin (USA) 100

Identification of brainstem neurons responding to hypoxia in fetal and newborn sheep
S. Breen, S. Rees and D. Walker (Australia) 107

Expression of presenilin-1 and -2 mRNAs in rat and Alzheimer's disease brains
K. Takami, K. Terai, A. Matsuo, D.G. Walker and P.L. McGeer (Japan, Canada) 122

Dynamics of EEG spindle frequency activity during extended sleep in humans: relationship to slow-wave activity and time of day
D. Aeschbach, D.-J. Dijk and A.A. Borbély (Switzerland) 131

Upregulation of angiotensin II AT_1 receptors in the mouse nucleus accumbens by chronic haloperidol treatment
T.A. Jenkins, S.Y. Chai and F.A.O. Mendelsohn (Australia) 137

Comparison of the effects of nucleus tractus solitarius and ventral medial medulla lesions on illness-induced and subcutaneous formalin-induced hyperalgesias
E.P. Wiertelak, B. Roemer, S.F. Maier and L.R. Watkins (USA) 143

Vulnerability to glucose deprivation injury correlates with glutathione levels in astrocytes
M.C. Papadopoulos, I.L. Koumenis, L.L. Dugan and R.G. Giffard (USA) 151

Effects of hypertonia on voltage-gated ion currents in freshly isolated hippocampal neurons, and on synaptic currents in neurons in hippocampal slices
R. Huang and G.G. Somjen (USA) 157

Effects of naltrexone and histamine antagonists on the antinociceptive activity of the cimetidine analog SKF92374 in rats
B.Y. Li, J.W. Nalwalk and L.B. Hough (USA) 168

(contents continued on p. 274)

0006-8993(19970214)748:1/2;1-M

BRAIN RESEARCH

VOL. 748 NOS. 1,2 **CONTENTS** **14 FEBRUARY 1997**

Cited in Biological Abstracts (BIOSIS) – Chem. Abstracts – Index Medicus (MEDLINE) – Current Contents (Life Sci.) – Excerpta Medica (EMBASE) – Psychological Abstracts (PsycINFO) – Pascal et Francis (INIST-CNRS) – RIS (Reference Update) – Current Awareness in Biological Science (CABS)

Publisher's Note v

Guidelines for the submission of manuscripts vii

Research reports

Rapid Ca^{2+}-dependent NO-production from central nervous system cells in culture measured by NO-nitrite/ozone chemoluminescence
S. Weikert, D. Freyer, M. Weih, N. Isaev, C. Busch, J. Schultze, D. Megow and U. Dirnagl (Germany, Russian Federation) 1

Corticotropin-releasing factor and systemic capsaicin-sensitive afferents are involved in abdominal surgery-induced Fos expression in the paraventricular nucleus of the hypothalamus
B. Bonaz and Y. Taché (USA) 12

Immunolocalization of the plasma membrane Ca^{2+} pump isoforms in the rat brain
T.P. Stauffer, D. Guerini, M.R. Celio and E. Carafoli (Switzerland) 21

Interleukin-6 inhibits long-term potentiation in rat hippocampal slices
A.-J. Li, T. Katafuchi, S. Oda, T. Hori and Y. Oomura (Japan) 30

Peptidases of the peripheral chemoreceptors: biochemical, immunological, in vitro hydrolytic studies and electron microscopic analysis of neutral endopeptidase-like activity of the carotid body
G.K. Kumar (USA) 39

Enhancement of central pressor effect of AVP in SHR and WKY rats by intracranial N^G-nitro-L-arginine
P. Paczwa, A.S. Budzikowski and E. Szczepańska-Sadowska (Poland) 51

Intrastriatal injection of a muscarinic receptor agonist and antagonist regulates striatal neuropeptide mRNA expression in normal and amphetamine-treated rats
J.Q. Wang and J.F. McGinty (USA) 62

Direct vasoactive intestinal polypeptide-containing projection from the suprachiasmatic nucleus to spinal projecting hypothalamic paraventricular neurons
R. Teclemariam-Mesbah, A. Kalsbeek, P. Pevet and R.M. Buijs (The Netherlands, France) 71

Effect of unilateral tympanotomy on auditory induced c-*fos* expression in cochlear nuclei
D.E. Hillman, C.E. Gordon, Y. Troublefield, E. Stone, R.J. Giacchi and S. Chen (USA) 77

Involvement of N- and P/Q- but not L- or T-type voltage-gated calcium channels in ischaemia-induced striatal dopamine release in vitro
C.C. Toner and J.A. Stamford (UK) 85

Effect of isolation-rearing on noradrenaline release in rat hypothalamus and hippocampus in vitro
A.J. Fulford and C.A. Marsden (UK) 93

Intracarotid glucose selectively increases Fos-like immunoreactivity in paraventricular, ventromedial and dorsomedial nuclei neurons
A.A. Dunn-Meynell, E. Govek and B.E. Levin (USA) 100

Identification of brainstem neurons responding to hypoxia in fetal and newborn sheep
S. Breen, S. Rees and D. Walker (Australia) 107

Expression of presenilin-1 and -2 mRNAs in rat and Alzheimer's disease brains
K. Takami, K. Terai, A. Matsuo, D.G. Walker and P.L. McGeer (Japan, Canada) 122

Dynamics of EEG spindle frequency activity during extended sleep in humans: relationship to slow-wave activity and time of day
D. Aeschbach, D.-J. Dijk and A.A. Borbély (Switzerland) 131

Upregulation of angiotensin II AT_1 receptors in the mouse nucleus accumbens by chronic haloperidol treatment
T.A. Jenkins, S.Y. Chai and F.A.O. Mendelsohn (Australia) 137

Comparison of the effects of nucleus tractus solitarius and ventral medial medulla lesions on illness-induced and subcutaneous formalin-induced hyperalgesias
E.P. Wiertelak, B. Roemer, S.F. Maier and L.R. Watkins (USA) 143

Vulnerability to glucose deprivation injury correlates with glutathione levels in astrocytes
M.C. Papadopoulos, I.L. Koumenis, L.L. Dugan and R.G. Giffard (USA) 151

Effects of hypertonia on voltage-gated ion currents in freshly isolated hippocampal neurons, and on synaptic currents in neurons in hippocampal slices
R. Huang and G.G. Somjen (USA) 157

Effects of naltrexone and histamine antagonists on the antinociceptive activity of the cimetidine analog SKF92374 in rats
B.Y. Li, J.W. Nalwalk and L.B. Hough (USA) 168

(contents continued on p. 274)

0006-8993(19970214)748:1/2;1-M

(contents continued)

Nimodipine's protection against corticosterone-induced morphological changes in the hippocampus of young rats
S. Dachir, T. Kadar, B. Robinzon and A. Levy (Israel) 175
Chlorpromazine reduces toxicity and Ca^{2+} uptake induced by amyloid β protein (25–35) in vitro
K. Ueda, T. Yagami, K. Asakura and K. Kawasaki (Japan) 184
Excitatory action of pituitary adenylate cyclase activating polypeptide on rat sympathetic preganglionic neurons in vivo and in vitro
C.C. Lai, S.Y. Wu, H.H. Lin and N.J. Dun (USA) 189
Microglia-derived cytotoxic factors. Part I: Inhibition of tumor cell growth in vitro
A.A. Rosales and R.S. Roque (USA) 195
A new mechanism of methylprednisolone and other corticosteroids action demonstrated in vitro: inhibition of a proteinase (calpain) prevents myelin and cytoskeletal protein degradation
N.L. Banik, D. Matzelle, E. Terry and E.L. Hogan (USA) 205
Static muscle contraction elicits a baroreflex-dependent increase in glutamate concentration in the ventrolateral medulla
G.A. Hand, J.T. Potts, B.S. Treuhaft, L.B. Wilson, F. Petty and J.H. Mitchell (USA) 211
Effects of novelty, pain and stress on hippocampal extracellular acetylcholine levels in male rats
A.M. Aloisi, F. Casamenti, C. Scali, G. Pepeu and G. Carli (Italy) 219
Inhibitory avoidance learning alters the amygdala calcium/calmodulin-dependent protein kinase II activity in rats
S.-E. Tan and K.-C. Liang (Taiwan) 227

Short communications

Gustatory receptor cell responses to the sweeteners, monellin and thaumatin
K. Tonosaki, K. Miwa and F. Kanemura (Japan) 234
Slow dendritic transport of dissociated mouse hippocampal neurons exposed to aluminum
I. Wakayama, K.-J. Song, V.R. Nerurkar, S. Yoshida and R.M. Garruto (Japan, USA, South Korea) 237
Role of dopamine D_1- and NMDA receptors in regulating neurotensin release in the striatum and nucleus accumbens
J.D. Wagstaff, J.W. Gibb and G.R. Hanson (USA) 241
Antibodies to macrophage inflammatory protein-1β in preoptic area of rats fail to suppress PGE_2 hyperthermia
J.A. Armengol, K. Benamar, A. Fernández-Alonso, M. Sancibrián, R.D. Myers and F.J. Miñano (Spain, USA) 245
Aβ1–40 but not Aβ1–42 levels in cortex correlate with apolipoprotein E ϵ4 allele dosage in sporadic Alzheimer's disease
K. Ishii, A. Tamaoka, H. Mizusawa, S.-i. Shoji, T. Ohtake, P.E. Fraser, H. Takahashi, S. Tsuji, M. Gearing, T. Mizutani, S. Yamada, M. Kato, P.H. St.George-Hyslop, S.S. Mirra and H. Mori (Japan, Canada, USA) 250
S100 protein-immunoreactive primary sensory neurons in the trigeminal and dorsal root ganglia of the rat
H. Ichikawa, D.M. Jacobowitz and T. Sugimoto (Japan, USA) 253
The maturation of $GABA_A$ receptor-mediated control of luteinizing hormone secretion in immature male rats
D. Mitsushima and F. Kimura (Japan) 258
Enhancement of the locomotor response to apomorphine in pertussis toxin-treated animals depends on the site of pertussis toxin injection into the ventral tegmental area
S. Narayanan, A. Dalia, L.J. Wallace and N.J. Uretsky (USA) 263
Lipopolysaccharide pre-treatment induces resistance against subsequent focal cerebral ischemic damage in spontaneously hypertensive rats
K. Tasaki, C.A. Ruetzler, T. Ohtsuki, D. Martin, H. Nawashiro and J.M. Hallenbeck (USA) 267

Author Index 271